

IN THE CLAIMS

Please amend claim 15 as follows:

1 1. (Previously Presented) A communication method in a wireless in-building
2 communication system connected to a public land mobile network including a mobile
3 switching center and a base station controller, said method comprising the steps of:
4 forming a common cell area in which a wireless public communication service and
5 a wireless in-building communication service are available through a private base station;
6 requesting a communication service at a mobile terminal in the common cell area;
7 determining, in response to the requesting of the communication service, whether
8 the mobile terminal is registered for the wireless in-building communication service;
9 providing the wireless in-building communication service to a registered mobile
10 terminal; and
11 bypassing the communication service request of an unregistered mobile terminal
12 to the public land mobile network.

Claims 2-4. (Canceled)

1 5. (Previously Presented) The method of claim 1, wherein the communication
2 service includes voice and data services.

Claims 6-9. (Canceled)

1 10. (Previously Presented) The method of claim 1, wherein signals from the
2 registered mobile terminal are outputted to at least one antenna mounted in said common
3 cell area, and said at least one antenna is coupled to the wireless in-building
4 communication system.

1 11. (Previously Presented) The method of claim 1, wherein the registered mobile
2 terminal communicates with one of a wire extension terminal and a wireless extension
3 terminal, and the registered mobile terminal wirelessly performs a data service through an
4 Internet protocol network.

Claims 12-14. (Canceled)

1 15. (Currently Amended) A unified in-building communication apparatus
2 connected to a public land mobile network, said apparatus comprising:

3 a private base station for forming a common cell area in which a public land
4 mobile network service and an in-building wireless network service are available;

5 a call manager responsive to a communication service request from a mobile
6 terminal in the common cell area for determining whether [[an]] the mobile terminal is
7 registered for the in-building wireless network service ~~of the mobile terminal is~~

8 ~~registered~~, and for controlling provision of a corresponding service according to a result
9 of the determination; and

10 a public/private communication service unit responsive to control by said ~~control~~
11 call manager for providing the in-building wireless network service to a registered mobile
12 terminal, and for ~~controlling an~~ bypassing the communication service request of an
13 unregistered mobile terminal ~~for connection~~ to the public land mobile network.

Claims 16-27. (Canceled)

1 28. (Previously Presented) The method of claim 1, wherein the wireless in-
2 building communication service provided to the registered mobile terminal includes a
3 communication service between the registered mobile terminal and a wire extension
4 terminal.

1 29. (Previously Presented) The method of claim 1, wherein the wireless in-
2 building communication service provided to the registered mobile terminal includes a
3 communication service between the registered mobile terminal and a wireless extension
4 terminal.

1 30. (Previously Presented) The method of claim 1, wherein the wireless in-
2 building communication system is connected to an Internet protocol network through a

3 local area network.

1 31. (Previously Presented) The method of claim 30, wherein the wireless in-
2 building communication service provided to the registered mobile terminal includes a
3 data communication service between the registered mobile terminal and an Internet
4 protocol network.

1 32. (Previously Presented) The apparatus of claim 15, wherein the public/private
2 communication service unit comprises:

3 an Internet protocol-private branch exchange for performing switching for
4 establishing communication between a mobile terminal in the common cell area and a
5 wire extension terminal, and for providing a path between a wireless extension terminal
6 and one of a public switched telephone network and an integrated service digital network;
7 and

8 a private base station controller for allocating a vocoder in response to a call
9 request of the mobile terminal in the common cell area, and for providing a
10 communication path to the mobile terminal in the common cell area.

1 33. (Previously Presented) The apparatus of claim 32, further comprising:

2 a router for providing access between the unified in-building communication
3 apparatus and an Internet protocol network; and

4 a local area network switch connected to the unified in-building communication
5 apparatus through the router for switching data of the unified in-building communication
6 apparatus, and for connecting the unified in-building communication apparatus to the
7 Internet protocol network through a local area network.

1 34. (Previously Presented) The apparatus of claim 33, further comprising a
2 transcoder and selector bank interface for providing an interface between the local area
3 network switch and the private base station controller.

1 35. (Previously Presented) The apparatus of claim 34, wherein the private base
2 station controller is connected to a private base station and to the public land mobile
3 network through respective communication lines, and includes a local interface assembly
4 for providing an interface therebetween.

1 36. (Previously Presented) The apparatus of claim 35, wherein the local interface
2 assembly generates and outputs inter-process communication data from communication
3 data which is received from the private base station and the public land mobile network,
4 and outputs communication data from inter-process communication data which is
5 transmitted to the private base station and the public land mobile network.

1 37. (Previously Presented) The apparatus of claim 36, further comprising a high

2 capacity inter-process communication node board assembly connected to the local
3 interface assembly, the transcoder and selector bank interface, and the call manger,
4 respectively, for performing inter-process communication data processing between the
5 local interface assembly, the transcoder and selector bank interface, and the call manager.